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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,665	10/03/2003	Thomas Rumpf	RUMPF ET AL-4	9747

7590 06/19/2006

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EXAMINER

COMPTON, ERIC B

ART UNIT	PAPER NUMBER
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3726

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/678,665	Applicant(s) RUMPF ET AL.	
	Examiner Eric B. Compton	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the processed bearing eye surface" in lines 1-2 (emphasis added). There is insufficient antecedent basis for this limitation in the claim. Although the limitation is preceded by the limitation "the bearing eye is processed," in claim1, line 4, it does not necessarily state (or require that) the bearing eye surface is processed.

Claim 3 recites "the bearing eye surface is processed for a precise fit after the divided bearing is assembled and is then galvanically coated with the anti-friction coating, before the anti-friction coating is divided in accordance with the division of the bearing eye through a fracture separation." (emphasis added). This claim language is ambiguous, since it is confusing as to whether the coating is applied before of after the fracture separation.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. 2,187,755 to Ryder in view of DE 19852481. Note: U.S. Pat. 6,537,683 is an English language equivalent and is being relied upon as a translation.

Ryder discloses forming a bearing eye having a running surface formed by an electroplating process (i.e., galvanically plating). The coating may be made up of multiple layers of different constituent materials.

However, the reference does not disclose applying a coating made of a harder alloy component and a softer alloy component, wherein the proportion of the softer alloy component in the deposited alloy increased with the coating thickness.

DE '481 discloses a method for producing a sliding bearing overlay coating (running surface layer) formed by an electroplating bath (i.e., galvanically plating). The overlay coating includes a harder alloy component and a softer alloy component. By controlling current and/or temperature the composition of the coating varies, such that the hardness increases from the surface inward, i.e., the softer component is greater at the surface. The reference discloses the drawbacks with the prior art, requiring

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alternating layers rather than varying the concentration of hard and soft components

See Col. 1, line 36+.

Regarding claim 1, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed the bearing eye of Ryder by applying a coating made of a harder alloy component and a softer alloy component, wherein the proportion of the softer alloy component in the deposited alloy increased with the coating thickness, in light of the teachings of DE '481, in order to provide a sliding bearing "which exhibits optimum properties during its entire service life." Col. 1, lines 66-67.

Regarding claim 2, DE '481 discusses this feature. See Col. 2, lines 18-23.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ryder/DE '481 as applied to claims 1 and 2 above, and further in view of Applicant's Admitted Prior Art (AAPA).

Ryder and DE '481 disclose the invention above. However, they do not disclose dividing the bearing eye by a fracture separation.

AAPA, as found on page 1 of the Specification, notes that it is known in the art to form connecting rods having bearing eyes by applying a coating, e.g., a thermal spray coating, to a bearing eye either before or after the fracture separation step.


Regarding claim 3, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have fracture separated the bearing eye of Ryder/DE '481, in light of the teachings of AAPA, in order to form a connecting rod.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B. Compton whose telephone number is (571) 272-4527. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Eric B. Compton
Primary Examiner
Art Unit 3726

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